



## State of Utah

JON M. HUNTSMAN, JR.  
*Governor*

GARY HERBERT  
*Lieutenant Governor*

## Department of Environmental Quality

William J. Sinclair  
*Acting Executive Director*

DIVISION OF AIR QUALITY  
Cheryl Heying  
Director

DAQE-IN0141160001-09

January 29, 2009

Rebecca Erdmann  
Sand and Swirl, Inc.  
1339 West 3300 South  
Ogden, UT 84401

Dear Ms. Erdmann:

Re: Intent to Approve: A Cultured Marble Manufacturing Plant  
Weber County; CDS B; Nonattainment and Maintenance Area  
Project Number: NSR0141160001

The attached document is the Intent to Approve for the above-referenced project. The Intent to Approve is subject to public review. Any comments received shall be considered before an Approval Order is issued. The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an Approval Order. An invoice will follow upon issuance of the final Approval Order.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. The project engineer for this action is Enqiang He, who may be reached at (801) 536-4010.

Sincerely,

John T. Blanchard, Manager  
Minor New Source Review Section

JTB:EH:dn

cc: Weber-Morgan Health Department

**STATE OF UTAH**

**Department of Environmental Quality**

**Division of Air Quality**

**INTENT TO APPROVE: A Cultured Marble Manufacturing Plant**

**Prepared By: Enqiang He, Engineer**  
**Phone: (801) 536-4010**  
**Email: che@utah.gov**

**INTENT TO APPROVE NUMBER**

**DAQE-IN0141160001-09**

**Date: January 29, 2009**

**Sand and Swirl, Inc.: Cultured Marble Manufacturer**

**Source Contact:**  
**Ms. Rebecca Erdmann**  
**Phone: (801) 389-6363**

**John T. Blanchard, Manager**  
**Minor New Source Review Section**  
**Utah Division of Air Quality**

## **ABSTRACT**

Sand and Swirl Inc. has proposed to operate a cultured marble manufacturing plant in Ogden in Weber County. The location is a Maintenance area for CO and a Non-attainment area for PM<sub>10</sub>. NSPS, NESHAP and MACT regulations do not apply to this source. Title V of the 1990 Clean Air Act does not apply to this source. The potential to emit totals, in tons per year, are as follows: VOC = 8.50 and HAPs = 5.21.

The NOI for the above-referenced project has been evaluated and has been found to be consistent with the requirements of UAC R307. Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an AO by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notification of the intent to approve will be published in the Ogden Standard Examiner on February 4, 2009. During the public comment period the proposal and the evaluation of its impact on air quality will be available for the public to review and provide comment. If anyone so requests a public hearing, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated. The proposed conditions of the AO may be changed as a result of the comments received.

### **Name of Permittee:**

Sand and Swirl, Inc.  
1339 West 3300 South  
Ogden, UT 84401

### **Permitted Location:**

Sand and Swirl, Inc.: Cultured Marble  
Manufacturer  
1339 West 3300 South  
Ogden, UT 84401

**UTM coordinates:** 415,161.86 m Easting, 4,562,197.72 m Northing  
**SIC code:** 2821 (Plastics Material, Synthetic Resins, & Nonvulcanized Elastomers)

## **Section I: GENERAL PROVISIONS**

- I.1 All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
- I.2 The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
- I.3 Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]
- I.4 All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401]

- I.5 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
- I.6 The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring. [R307-150]
- I.7 The owner/operator shall comply with UAC R307-107. General Requirements: Unavoidable Breakdowns. [R307-107]

## **Section II: SPECIAL PROVISIONS**

### **II.A The approved installations shall consist of the following equipment:**

- II.A.1 **The Cultured Marble Manufacturing Plant**  
Plantwide
- II.A.2 **Spray Booth**  
One (1) spray booth with one airless spray gun
- II.A.3 **Mixer**  
One (1) batch mixer rated at 250 lbs
- II.A.4 **Space heaters**  
Misc. space heaters rated at less than 5 MMBtu/hr

### **II.B Requirements and Limitations**

- II.B.1 Sand and Swirl shall notify the Executive Secretary in writing when the installation of the equipment listed in Condition #II.A has been completed and is operational. To ensure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If the construction and/or installation have not been completed within eighteen months from the date of this AO, the Executive Secretary shall be notified in writing on the status of the construction and/or installation. At that time, the Executive Secretary shall require documentation of the continuous construction and/or installation of the operation and may revoke the AO in accordance with R307-401-18.

### **II.B.2 Conditions on the Spray Booth**

- II.B.2.a The filters shall control process streams from the spray booth. All exhaust air from the booth

shall be routed through the filters before being vented to the atmosphere. The filters shall be operated and replaced in accordance with manufacturer's recommendations. [R307-401]

II.B.2.b Visible emissions from the spray booth shall be controlled such that Opacity  $\leq$  10 percent. Opacity observations from the spray booth shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-401]

II.B.2.c The plant-wide emissions of VOCs and HAPs from the cultured marble manufacturing process and associated operations shall not exceed:

8.50 tons per rolling 12-month period for VOCs  
 5.20 tons per rolling 12-month period for Styrene  
 9.6 pounds per rolling 12-month period for Toluene  
 0.42 pounds per rolling 12-month period for Xylene  
 5.21 tons per rolling 12-month period for all HAPs combined

Compliance with the limitations shall be determined on a rolling 12-month total. Based on the last day of each month, a new 12-month total shall be calculated using data from the previous twelve months. Monthly calculations shall be made no later than twentieth days after the end of each calendar month.

Emission calculations for styrene shall be based on the methods and emission factors used in the AP-42 Section 4.4, Polyester Resin Plastic Products Fabrication, and 40 CFR63 Subpart www although the source is not subject to the MACT.

All other VOC and HAP emissions shall be determined by maintaining a record of VOC and HAP emitting materials used each month. The record shall include the following data for each material used:

A. Name of the VOC and HAPs emitting material, such as: paint, adhesive, solvent, thinner, reducers, chemical compounds, toxics, isocyanates, etc.

B. Density of each material used (pounds per gallon)

C. Percent by weight of all VOC and HAP in each material used

D. Gallons of each VOC and HAP emitting material used

E. The amount of VOC and HAP emitted monthly by each material used shall be calculated by the following procedure:

$$\text{VOC} = (\% \text{ VOC by Weight})/100 \times [\text{Density (lb/gal)}] \times \text{Gal Consumed} \times (1 \text{ ton}/2000 \text{ lb})$$

$$\text{HAP} = (\% \text{ HAP by Weight})/100 \times [\text{Density (lb/gal)}] \times \text{Gal Consumed} \times (1 \text{ ton}/2000 \text{ lb})$$

F. The amount of VOC or HAP emitted monthly from all materials used.

G. The amount of VOCs or HAPs reclaimed for the month shall be similarly quantified and subtracted from the quantities calculated above to provide the monthly total VOC or HAP

emissions. [R307-401]

II.B.2.d        The VOC containing materials and VOC laden rags shall be stored in covered containers (except when in use). [R307-401]

### **PERMIT HISTORY**

The final AO will be based on the following documents:

Incorporates	additional information dated October 23, 2008
Is Derived From	NOI dated February 5, 2008

## ACRONYMS

The following lists commonly used acronyms and their associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
ATT	Attainment Area
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by EPA to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CO	Carbon monoxide
COM	Continuous opacity monitor
DAQ	Division of Air Quality (typically interchangeable with UDAQ)
DAQE	This is a document tracking code for internal UDAQ use
EPA	Environmental Protection Agency
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
MACT	Maximum Achievable Control Technology
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO <sub>x</sub>	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM <sub>10</sub>	Particulate matter less than 10 microns in size
PM <sub>2.5</sub>	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO <sub>2</sub>	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
UAC	Utah Administrative Code
UDAQ	Utah Division of Air Quality (typically interchangeable with DAQ)
VOC	Volatile organic compounds